

AMENDMENTS TO THE CLAIMS

1. (currently amended) Oxygen nanobubble water, ~~which is~~ comprising an aqueous solution having multiple oxygen nanobubbles therein, each of said oxygen nanobubbles: containing oxygen, wherein the having a bubble diameter of thereof is 200 nm or less, and being surrounded by an inorganic shell comprised predominantly of electrolytic ions positioned to inhibit said oxygen from dissolving into the aqueous solution.

2. (currently amended) Oxygen nanobubble water ~~which is~~ comprising an aqueous solution having multiple oxygen nanobubbles therein, each of said oxygen nanobubbles: containing oxygen, wherein the having a bubble diameter of thereof is 200 nm or less, and being surrounded by an inorganic shell comprised predominantly of electrolytic ions positioned to inhibit said oxygen from dissolving into the aqueous solution, [[and]] the aqueous solution having a salinity concentration of the aqueous solution is set in the range of 0.01% to 3.5%.

3. (currently amended) A method of producing oxygen nanobubble water, ~~wherein oxygen nanobubbles are formed by~~ said method comprising:

applying physical irritation to oxygen-containing microbubbles contained in an aqueous solution, each of said microbubbles having a microbubble diameter, to thereby reduce said microbubble the bubble diameter of the microbubble abruptly and create a number of oxygen nanobubbles that contain oxygen; and

surrounding each of said oxygen nanobubbles by an inorganic shell comprised predominantly of electrolytic ions positioned to inhibit said oxygen from dissolving into the aqueous solution.

4. (currently amended) The method of producing oxygen nanobubble water according to claim 3, said method further comprising:

~~wherein in the step of abruptly reducing the microbubbles in size, and~~ when said microbubble ~~[[the]] diameter of the microbubble~~ is reduced to 200 nm or less, a charge density on a ~~[[the]] surface of the microbubble~~ increases and an electrostatic repulsive force is produced, whereby a ~~[[the]] size reduction of the microbubble~~ stops.

5. (currently amended) The method of producing oxygen nanobubble water according to claim 3, said method further comprising:

~~wherein in the step of abruptly reducing the microbubbles in size, due to ions adsorbed on a gas-liquid interface and an electrostatic attraction, both ions in the aqueous solution having opposite charges to each other and attracted to a~~ ~~[[the]] vicinity of the interface are concentrated in a high concentration so as to serve as a shell surrounding the microbubble and inhibit a~~ ~~[[the]] dissolution of oxygen within the microbubble into the aqueous solution, whereby the oxygen nanobubble is stabilized.~~

6. (currently amended) The method of producing oxygen nanobubble water according to claim 3, wherein ~~[[the]] ions adsorbed on a gas-liquid interface are hydrogen ions and hydroxide ions and electrolytic ions within the aqueous solution~~

[[are]] used as [[the]] ions attracted to a [[the]] vicinity of an [[the]] interface, whereby the oxygen nanobubble is stabilized.

7. (currently amended) The method of producing oxygen nanobubble water according to claim 3, said method further comprising:

~~wherein in the step of abruptly reducing the~~ microbubbles in size, a [[the]] temperature within the microbubble sharply rising rises by adiabatic compression so that a physicochemical change in association with the ~~ultrahigh~~ temperature is applied around the microbubble, whereby the oxygen nanobubble is stabilized.

8. (original) The method of producing oxygen nanobubble water according to claim 3, wherein the physical irritation is to discharge static electricity through the microbubbles using a discharge device.

9. (original) The method of producing oxygen nanobubble water according to claim 3, wherein the physical irritation is to apply ultrasonic irradiation to the microbubbles using an ultrasonic generator.

10. (original) The method of producing oxygen nanobubble water according to claim 3, wherein the physical irritation is to cause the aqueous solution to flow by driving a rotor mounted in a vessel containing therein the aqueous solution and use compression, expansion and vortex flow which are produced during the flowing.

11. (currently amended) The method of producing oxygen nanobubble water according to claim 3, wherein in the case of having a circulating circuit in the vessel, the physical irritation is to cause compression, expansion and vortex flow of the aqueous solution by passing the solution through an orifice or perforated plate having a single hole or many holes after receiving the aqueous solution in which the microbubbles are contained.

12. (new) The method of producing oxygen nanobubble water according to claim 3, wherein said applying the physical irritation to the microbubbles comprises:
applying the physical irritation to the microbubbles to thereby reduce said microbubble diameter from between 10 and 50 μm to 200 nm or less.

13. (new) The method of producing oxygen nanobubble water according to claim 3, said method further comprising:
adding electrolytes to the aqueous solution to enable an electric conductivity of the aqueous solution to reach 300 $\mu\text{S/cm}$ or more to inhibit a reduction in size of the microbubble diameter.